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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KADING, JOSHUA A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/821,536	Applicant(s) SHAFFER ET AL.	
	Examiner Joshua Kading	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☒ Claim(s) 11,17,22,33,and 47 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/01</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 11, 17, 22, 33, and 47 are objected to because of the following informalities:

5 Claim 17, lines 1-2 state "further comprising associating". This is a method step in an apparatus claim. It is therefore, suggested that lines 1-2 be changed to --further comprising means for--.

Line 2 of claims 11, 22, 33, and 47 state "...comprises a gateway to a..." It is suggested this be changed to --...comprises a gateway connected to a...--

10 Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20

Claims 1-7, 12-18, 23-29, 34, and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand (U.S. Patent 6,512,746 B1).

25 Regarding claim 12, Sand discloses "a system logging voice quality issues, comprising: means for receiving a signal from a user for logging quality information for

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packet switched voice connection at an endpoint the voice connection (col. 5, lines 51-58 where the IP datagrams (signals) are received at the endpoint to determine voice GOS or quality); means for collecting voice samples from the voice connection at the endpoint (col. 5, lines 51-58); and means for storing the voice samples in a...log at the
5 endpoint (col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6)."

However, Sand does not explicitly disclose that the log is an "error" log. Although the log (calibration file) of Sand is not called an "error" log, it would have been obvious
10 to one with ordinary skill in the art at the time of invention to call the file an "error log" as a matter of design choice. The name of the file does not matter so much as what is stored in that file. In the case of Sand, the calibration file contains the voice samples as indicated in the claim language. The motivation for using a log is to have an acceptable benchmark with which to compare voice transmitted through the network; this will allow
15 the endpoint(s) to determine voice quality and thus determine if the network can support a VOIP connection.

Claim 1 has similar limitations to those of claim 12, and although claim 1 is a method claim and claim 12 is an apparatus claim, the same reasons and motivation for
20 rejecting claim 12 are used to reject claim 1.

Claim 23 has similar limitations to those of claim 12, and although claim 23 is a computer program based claim and claim 12 is an apparatus claim, the same reasons and motivation as in claim 12 are used to reject claim 23. Including the additional limitation of "logic encoded in media (col. 4, lines 59-61).

5

Regarding claim 34, Sand discloses "a method logging voice quality issues, comprising: receiving a signal initiated by a user at an endpoint indicating voice quality degradation of an ongoing voice connection (col. 5, lines 51-58 where the IP datagrams (signals) are received at the endpoint to determine voice GOS or quality); collecting
10 voice samples from voice connection at the endpoint (col. 5, lines 51-58); collecting system parameters indicative quality the voice connection at the endpoint, the system parameters corresponding in time to the voice samples (col. 6, lines 5-10); synchronizing the system parameters with the voice samples (col. 6, lines 11-28 where the "post correlation analysis" taken in step 2 provides the data for appropriately
15 synchronizing the system parameters with the voice samples because the IP source/destination, and timestamp are unique for each voice sample and thus this information can be used to further synchronize the samples at a latter time); and storing the voice samples and system parameters synchronously in a...log at the endpoint (col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on
20 acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6)."

However, Sand does not explicitly disclose that the log is an "error" log. Although the log (calibration file) of Sand is not called an "error" log, it would have been obvious

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to one with ordinary skill in the art at the time of invention to call the file an "error log" as a matter of design choice. The name of the file does not matter so much as what is stored in that file. In the case of Sand, the calibration file contains the voice samples as indicated in the claim language. The motivation for using a log is to have an acceptable
5 benchmark with which to compare voice transmitted through the network; this will allow the endpoint(s) to determine voice quality and thus determine if the network can support a VOIP connection.

Claim 38 has similar limitations to those of claim 34, and although claim 38 is
10 broader than claim 34, the same reasons and motivation for rejecting claim 38 are used to reject claim 34.

Regarding claims 2, 13, 24, and 39, Sand discloses the methods of claims 1 and 38, and the systems of claims 12 and 23. Although Sand does not explicitly disclose the
15 error log, Sand does further disclose "means for maintaining the error log at the endpoint (col. 7, lines 31-43 where the process of using the calibration file to compare the sent/received signal means that the file has been maintained, at least for use in the comparison; further it should be noted that the signal and samples produced are locally collected, i.e. they are collected at the endpoint received)." It would have been obvious
20 to one with ordinary skill in the art to include the maintaining of the calibration file for the same reasons and motivation as in claims 1, 12, 23, and 39.

Regarding claims 3, 14, 25, and 40, Sand discloses the methods of claims 1 and 38, and the systems of claims 12 and 23. Although Sand does not explicitly disclose the error log, Sand does further disclose, "wherein the signal comprises a locally initiated signal (col. 7, lines 35-37 where the signal is produced at a local endpoint)" and
5 "wherein the signal comprises a signal initiated at the endpoint (claim 38; col. 7, lines 35-37 where the signal is produced at a local endpoint)." It would have been obvious to one with ordinary skill in the art to include the locally initiated signal for the same reasons and motivation as in claims 1, 12, 23, and 38.

10 Regarding claims 4, 15, 26, and 41, Sand discloses the methods of claims 1 and 38, and the systems of claims 12 and 23. Although Sand does not explicitly disclose the error log, Sand does further disclose, "means for collecting system parameters indicative of quality of the voice connection at the endpoint (col. 6, lines 5-10); and means for storing the system parameters in the error log at the endpoint (col. 7, lines
15 31-34 where the system parameters from col. 6 are used in the creation of the log file and therefore are inherently stored in the log file)." and "collecting system parameters indicative of quality of voice connection at the network node (claim 41; col. 6, lines 5-10)." It would have been obvious to one with ordinary skill in the art to include the system parameters for the same reasons and motivation as in claims 1, 12, 23, and 38.

Claims 5, 16, and 27 are identical in language to claims 2, 13, and 24, therefore claims 5, 16, and 27 are rejected for the same reasons and motivation as in claims 2, 13, and 24.

5 Regarding claims 6, 17, 28, and 42, Sand discloses the methods of claims 4 and 41, and the systems of claims 15 and 26. Although Sand does not explicitly disclose the error log, Sand does further disclose, "means for associating system parameters corresponding in time to a voice sample with the voice sample in the error log (col. 6, lines 5-10 where the parameters are all determined based on several characteristics
10 including a timestamp)." It would have been obvious to one with ordinary skill in the art to include the system parameters for the same reasons and motivation as in claims 4, 15, 26, and 41.

 Regarding claims 7, 18, 29, 36, and 43, Sand discloses the methods of claims 4,
15 34 and 41, and the systems of claims 15 and 26. Although Sand does not explicitly disclose the error log, Sand does further disclose, "wherein the system parameters comprise a plurality of lost and late packet counts (col. 6, lines 6-7), convergent state of echo cancellers (col. 6, lines 27-28 where the echo values used here are parameters used in conjunction with those of step 4), number of packets stored in a jitter buffer (col.
20 6, lines 6-7 where as is known in the art jitter is partially determined using the number of packets stored in the jitter buffer) and end-to-end latency of the voice connection at the endpoint (col. 6, lines 6-7)." It would have been obvious to one with ordinary skill in the

art to include the system parameters for the same reasons and motivation as in claims 4, 15, 26, 34, and 41.

Regarding claim 37, Sand discloses the method of claim 34. Although Sand does not explicitly disclose the error log, Sand does further disclose, "wherein the voice connection comprises a voice over Internet protocol (VoIP) connection (col. 5, lines 55-56 where IP voice datagrams mean the connection is VoIP)." It would have been obvious to one with ordinary skill in the art to include the VoIP connection for the same reasons and motivation as in claims 34.

Claims 8-11, 19-22, 30-33, 35, and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand in view of Thornton et al. (U.S. Patent 6,363,065 B1).

Regarding claims 8, 19, 30, and 44, Sand discloses the methods of claims 1 and 38, and the systems of claims 12 and 23. Sand also discloses, "...a second endpoint to the voice connection to log quality information for the voice connection at the second endpoint (col. 6, lines 21-22), the quality information including voice samples from the voice connection at the second endpoint (col. 5, lines 55-58 where the IP datagrams constitute voice samples)."

However, Sand lacks what Thornton discloses, "wherein the endpoint is a first endpoint, further comprising means for signaling..." the second endpoint (col. 42, lines 57-col. 43, lines 1-9 where the gateways communicate with each other through the

signalling network and communicate "registration, admissions, bandwidth usage, and status messages between" them).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the signalling between endpoints for the purpose of communicating
5 between the two of them. The motivation for having two endpoints communicate is so that when a call or setup is requested, the required bandwidth and other resources can be allocated based on the need of the call and thus the call can then be placed.

Regarding claims 9, 20, 31, and 45, Sand and Thornton disclose the methods of
10 claims 8 and 44, and the systems of claims 19 and 30. However, Sand lacks what Thornton further discloses, "means for identifying the second endpoint at the first endpoint (col. 42, lines 57-col. 43, lines 1-9, if one gateway can communicate with the other, both gateways must be known and identified to each other)." It would have been obvious to one with ordinary skill in the art to identifying the second endpoint for the
15 same reasons and motivation as in claims 8, 19, 30, and 44.

Regarding claims 10, 21, 32, and 46, Sand and Thornton disclose the methods of claims 9 and 45, and the systems of claims 20 and 31. Sand also discloses, "...log quality information (col. 7, lines 31-34 where the calibration file is a sort of log file that
20 contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6)..." However, Sand lacks what Thornton further discloses, "means for opening a control channel to the second endpoint (col. 42, lines 57-col. 43,

lines 1-3 where the RAS channel is the control channel); and means for signaling the second endpoint... over the control channel (col. 42, lines 57-col. 43, lines 1-9 where the RAS channel is the control channel and is used to transmit various control information between endpoints)." It would have been obvious to one with ordinary skill in the art to

5 open a control channel and signal the second endpoint for the same reasons and motivation as in claims 9, 20, 31, and 45.

Regarding claims 11, 22, 33, and 47, Sand and Thornton disclose the methods of claims 10 and 46, and the systems of claims 21 and 32. However, Thornton lacks what
10 Sand further discloses, "the second endpoint comprises a gateway to a PSTN (figure 2, elements 29 are PSTN's connected to the network via gateways)." It would have been obvious to one with ordinary skill in the art to have the second endpoint comprise a gateway connected to a PSTN for the same reasons and motivation as in claims 10, 21, 32, and 46.

15

Regarding claim 35, Sand and Thornton disclose the method of claim 34. Sand also discloses, "...log quality information (col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6)..." However, Sand lacks what Thornton
20 further discloses, "identifying the second endpoint at the first endpoint (col. 42, lines 57-col. 43, lines 1-9, if one gateway can communicate with the other, both gateways must be known and identified to each other); opening a control channel to the second

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endpoint (col. 42, lines 57-col. 43, lines 1-3 where the RAS channel is the control channel); and means for signaling the second endpoint...over the control channel (col. 42, lines 57-col. 43, lines 1-9 where the RAS channel is the control channel and is used to transmit various control information between endpoints)." It would have been obvious to one with ordinary skill in the art to include the identifying of the second endpoint, opening a channel to the endpoint, and signaling to the endpoint for the same reasons and motivation as in claim 34.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

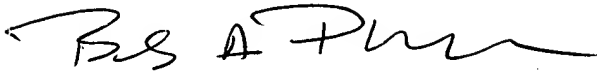
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Joshua Kading
Examiner
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October 28, 2004



BOB PHUNKULH
PRIMARY EXAMINER